Project 1 Technical Design Dossier

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PLANNING & PROCESS

Being an international student myself, I find myself having difficulty fitting in with the climate situation. Toronto's weather is extremely cold in comparison to my home country and hence I came up with the problem space. The problem space for this project is the adaptation of foreign individuals towards the climate condition in a particular location. This problem space has occurred to me when I was given the assignment in CSC318, but which I did not explore deeper. However, my interest to this problem space led me to revisit this topic and decided on making it the center of this project for CCT380. My interest to this project was mainly due to the positive and interesting responses I received from fellow CSC318 classmates, TA, and Professor. In CSC318, I did a workshop where I conducted a survey to fellow classmates, and the responses showed that the need for this project to be developed is high since a lot of international students and even locals relate to the extreme weather in Toronto.

STUDIES, ANALYSIS, AND REFLECTION OF PROBLEM SPACE

The problem space identified above is the adaptation of foreign individuals towards a certain climate condition. This problem space, to some, appears to be irrelevant since some individuals live in places where both extreme cold and extreme hot climate exists. However, some countries, such as tropical countries, would not have cold seasons and hence would have a lack of experience when exposed to such condition. I categorized myself as being part of the target audience to this problem space, as my home country Indonesia does not have Autumn or Winter season. I have previously conducted an informal survey to my classmates in CSC318 in which I receive responses claiming that they also have difficulty adapting to the changes of season or climate condition.

These informal survey results have led me to believe that a solution is indeed necessary, and that the problem space is worth exploring. What's more convincing is the feedback that even locals would still have trouble mainly due to the unpredictable climate condition in Toronto. Hence, the target audience is not limited to just foreigners or in the sense international individuals, but to everyone which is a great insight since my project will be usable and important to everyone.

THOUGHT PROCESS

I started planning out the project by thinking of what the app will offer. I put importance in having the user's own personalized wardrobe inside my app so that their fashion preference, culture, style, and anything else are all personalized to their personal wardrobe. The digitalized personal wardrobe of the user will also allow for the user to feel the connection between themselves and the app, which I believe to be a great addition since that will increase user interaction with the app. Finally, this feature will avoid the stereotyping of gender or culture as all suggestions will be made from their personal digital wardrobe.

The second main feature is to have the app synchronized with the weather app. This is another important feature to the design as users would want to easily get their outfit suggestion without having to input the weather condition themselves. The prevention of such boring and redundant is a plus point to the app as users can make use of the app without having to go back and forth between my application and the weather app for weather information.

After synchronizing the app with the weather app to get the daily weather, the app will provide a feature that will allow its user to categorize their outfit for the day before asking for suggestion. The third main feature is the "Give me suggestion" button, in which the app will reflect on the weather and suggest the user with a set of outfits taken from their digitalized wardrobe.

I think that these three main features are enough to get the user to make use of the app, which is to get the outfit of the day suggestion in respect to the weather condition and filters that the user has placed.

SKETCHES AND WIREFRAMES
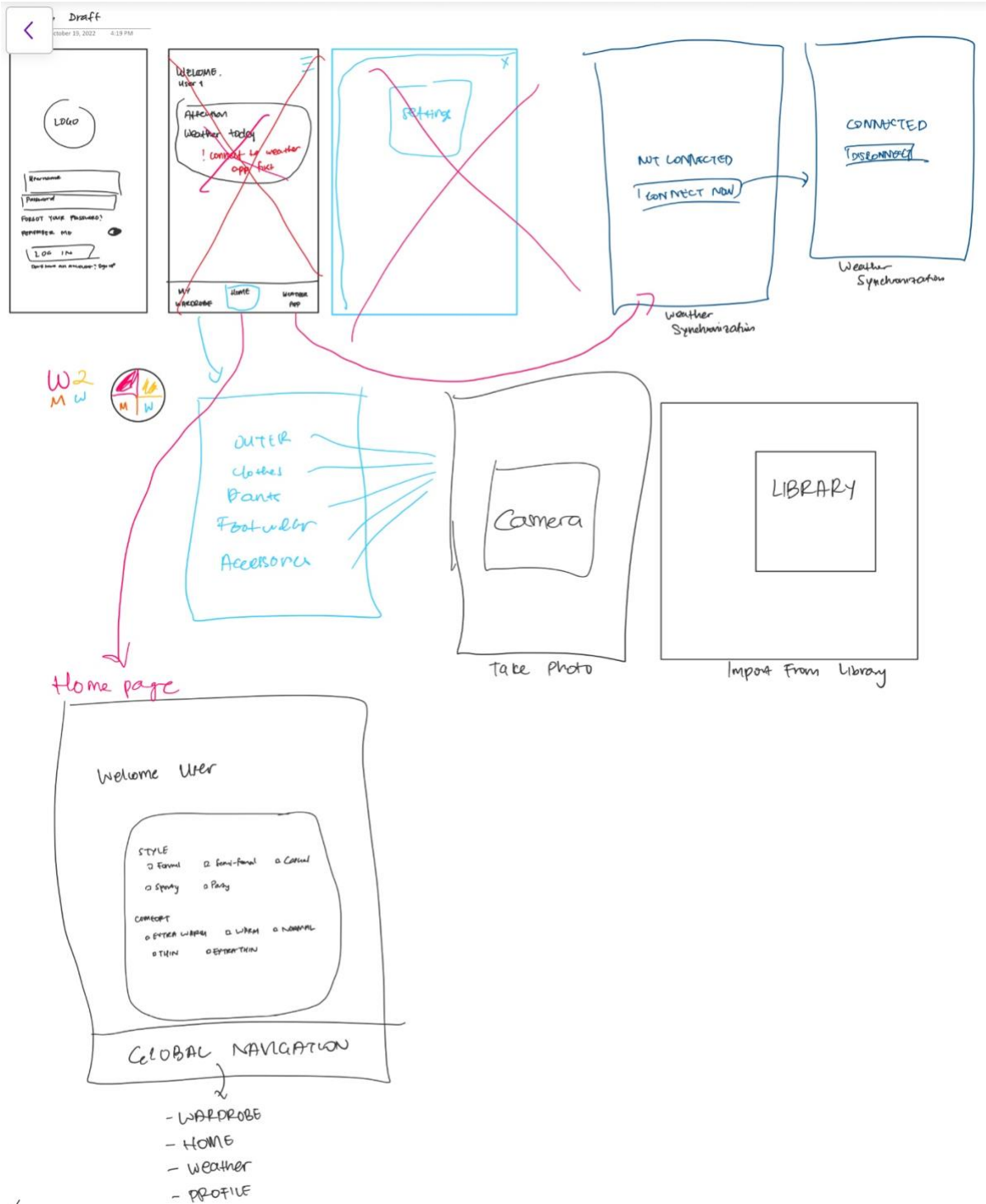
Figure 1. Draft Sketch & Wireframe

Figure 1 shows the process of making the medium-fi prototype by first creating a handwritten draft of pages and logo design that is intended to be designed. This step is very crucial to avoid confusion when designing further in Illustrator (Logo) and XD (the wireframes). Some ideas were removed when making the prototype and improvements were made. This step is crucial in making the final functioning prototype.

VISUAL IDENTITY

The logo is designed to fit the application's purpose. It is shaped like a circle separated into 4 individual quarters. The significance of the number 4 represents the 4 seasons, Spring, Summer, Autumn, and Winter. Each quarter is also color coded to fit the representation of the 4 seasons. Next, the first character of each word from the project name "Weather 2 My Wardrobe" which results in "W2MW" is placed in each quarter of the circle in order. The thought process of this logo design is to incorporate the seasons, as well as making the project vibe as personal to the user as possible, hence "My Wardrobe". The number '2', a wordplay of the word "to" also have its significance. Since the wardrobe is going to be digital, it will be the second wardrobe of the user, and hence the number "2".

The content page background is a picture of my personal wardrobe door. The original color of the wardrobe is white, and hence I decide to follow the course and make a bright themed background. Using photoshop, I change the contrast, brightness, and level to make the background calming blue and not just plain white. Among all colors of the season, I also perceive that blue is the most universal, as it may represent winter cold, and the clear skies during spring, summer, and autumn.

I revolve my design around the color palette of soft blue, white, soft green, and grey. This allows me to provide enough contrast to abide with the first principle of legibility, while maintaining consistency in the appearance of each page and design.

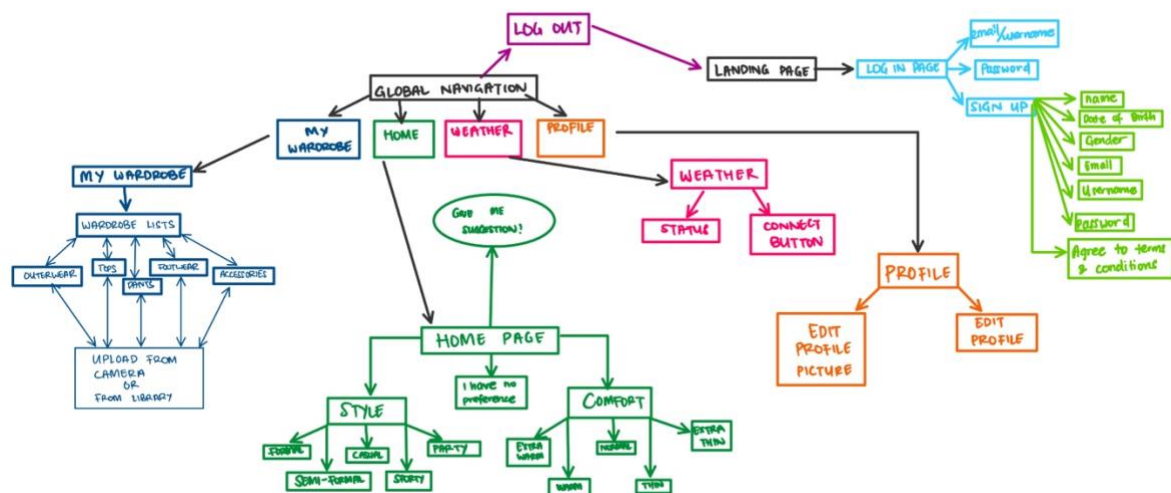**INFORMATION ARCHITECTURE**
Figure 2. Sitemap

Figure 2 shows the information architecture of the functioning prototype. The information architecture shows each feature which includes the global navigation, the buttons that allow interactions, and contents in each as well as its link to one another. All components of the sitemap are important key features of the functioning prototype.

PROTOTYPE + PRINCIPLES
1. Make display legible (Principle 1)
   Throughout the whole design process, I fully implement this principle to have user access all information with ease. This principle is maintained continuously through the

inclusion of different font colors and size, as well as background colors that would support the visibility of the text.

2. Absolute judgement limits (Principle 2)
    Figure 3. Homepage

This principle is implemented in the homepage as shown in figure 3. The options provided for style and comfort filtering complies to the second design principle of absolute judgement limits by giving user with 5 different options. This is more apparent with the comfort category, in which the user can categorize their preference in 5 different levels ranging from extra warm outfit to extra thin outfit. This implemented principle will greatly help in providing users with more flexibility and better choices.

3. Top-down processing (Principle 3)
    Figure 4. Sign up page + terms and conditions check box
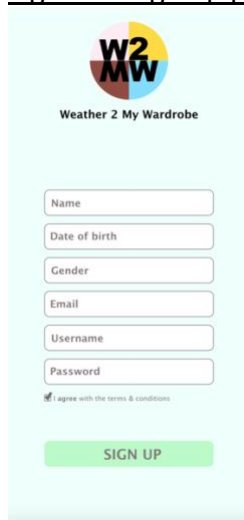
This principle can be seen where small check boxes are available. People who see a white box next to a text would naturally try and click the box, and the following task performed is a tick sign signifying selection appearing. This is an example of a top-down processing principle implemented, in which no further commands are required

and yet the users would still get a hunch of what to do. An example of the box and tick design can be seen in figure 4.

4. Redundancy gain (Principle 4)
   Figure 5. Example to global navigation

This principle is implemented throughout the main pages other than the login and sign-up page and can be found in the global navigation section. The use of both icon and word captioning provides the principle of redundancy gain in which users can be sure of what the element signifies. As an example of the many pages from the functioning prototype, figure 5 shows the global navigation at the bottom of the page which will allow users to know both by the icon and text that the current page signifies the "My Wardrobe" page.

5. Discriminability (Principle 5)
   Figure 6. Example of camera page
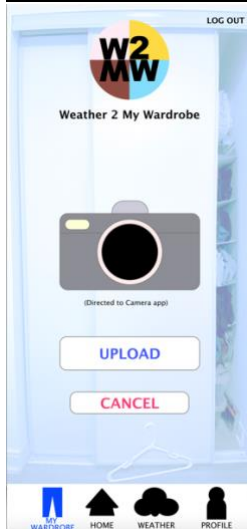
The principle of discriminability is present and utilized mostly to differentiate tasks. As an example, from figure 6, the upload and cancel buttons are discriminated by colors, in which cancel is written in red which most people would by nature perceive the information to reject/cancel, as its function would work. The upload button on the other hand is colored blue and signifies more towards success and addition, and hence

blue works better to the context. The discriminability of these tasks is very useful for users to identify information with minimal effort, as they would follow the universal color code where red often symbolize restriction or cancellation, and blue the otherwise.

6. Minimizing information access cost (Principle 8)

Figure 7. Another example of page with global navigation

This principle is again implemented by the global navigation, which is present throughout the design, located at the bottom of the page. The global navigation element allows user to travel through pages with ease and access key pages without having to return to home page and access other features. This principle allows for effective page navigation and hence safe time and usefulness of the prototype.

7. Proximity compatibility principle (Principle 9)

Figure 8. edit profile picture page

This principle functions to group similarly functioning buttons in proximity. In the example from figure 8, the 'take photo' and 'import from library picture' button are placed in proximity so that users can identify the button function, which is to select a picture for the profile picture. This principle is very important to inform the users regarding the button function and task performed when interacted with.

8. Replace memory with visual information: knowledge in the world (Principle 11)
   Figure 9. Home button visualized by a home figure
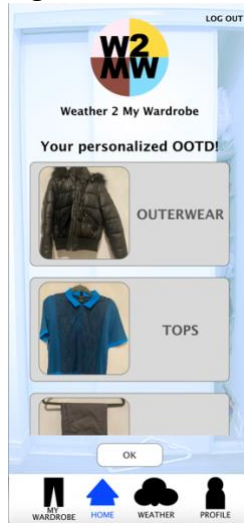
This principle discusses the idea in which design are more easily interpreted if it provides strong reference to the knowledge in the world. This can be seen in the example of figure 9, where the home button is visualized by a house figure which points to a direct referencing of a house building in real world. Hence, users can easily perceive the information as a home button without having to read the text.

9. Principle of predictive aiding (Principle 12)
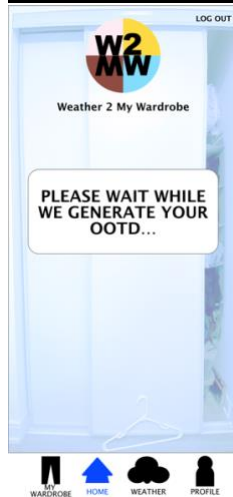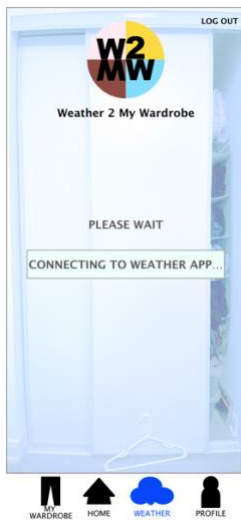   Figure 10. Wait page for generating the OOTD (main function)

Figure 11. Wait page for connection status to the weather app

This principle is implemented when users hit the command and the app requires a bit of time to process. The pages will show information that foresee the future, whilst informing the user that the process is taking place and not a failure. A signifier of the task successfully performed is very important to the user to know whether they are waiting for some process to be performed or only wasting their time waiting for nothing. This can be seen in figure 10 and 11, where a page informing users to wait while the task is under process is shown. This naturally make the user wait until their wanted page appears and signify that the task has been successfully performed.

10. Principle of consistency (Principle 13)
    Figure 12. cancel button example + global navigation example
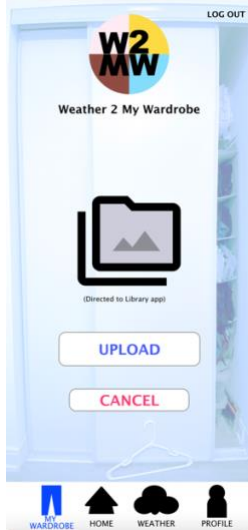
The principle of consistency is also present throughout the design, in which the design follows the principle to ease user interaction. The example above shows that the cancel task button is written in red, which oblige to the universal consistency which connect cancel to the label red.

The second example of the principle can be seen with the log out button which is located at the top right of the page. This follows the consistency in which log out buttons are usually located on a desktop webpage. By following this principle for the log out button, users will navigate and identify the logout button with ease.

The third example to this principle can be seen with the location of the profile page button on the global navigation section. The placement is not random but follows the principle of consistency. I placed the profile button at the rightmost part of the global navigation, as it is with most design of other system so users can navigate and find that button easily and perform the task.

The principle of consistency can be found in a lot of part throughout the functioning prototype. To list a view are the location of the home button on the global navigation, the 'dismiss' and 'ok' buttons, the not connected and connected text written in different colors, and many more. This principle is highly crucial as it greatly affect the user's navigation.

REFLECTING THE ISO 9241-210 STANDARD

According to the discussion held in class, a good design should fit the ISO 9241-210:2019 edition of human-centered design. Throughout the design process, I reflect my ideas upon the ISO guidelines, towards the rationale for adopting human-centred design. Being aware of the importance of user experience in the design, I focus my design and ideas to give easy and useful user navigation, and to minimize unnecessary steps in doing tasks. The design seeks to increase user productivity and provide easily understandable information without the need for explicit tutorial or direction. The app's main mission is to also reduce discomfort and stress in real life as well as when interacting with the app. Since the app can offer real life guidance, this app strongly adopts the human-centred design standard.